

AMENDMENTS

In the Claims

1. (Currently Amended) An information handling system comprising:
processing components operable to generate information for storage on an optical medium;
an optical disk drive interfaced with the processing components and operable to process the information for writing to the optical medium;
a hard disk drive separate from and interfaced with the optical disk drive;
a write strategy table having plural write strategies, each write strategy associated with one or more optical medium types;
a laser associated with the optical disk drive and operable to illuminate the optical medium to burn information onto the optical medium with a write strategy associated with the optical medium or to read information from the optical medium; and
an Optical Power Calibration (OPC) engine interfaced with the write strategy table and the laser, the OPC engine operable to perform test writes and reads at plural distributed locations of the optical medium, the test writes having predetermined variations of the write strategy associated with the optical medium, the OPC engine adjusting the write strategy to write the generated information to the optical medium based on the quality of modulated signals read from the test writes at the distributed locations, the OPC engine further operable to store the adjusted write strategy to **a** ~~the~~ hard disk drive for use in subsequent writes.
2. (Original) The information handling system of Claim 1 wherein the OPC engine test writes are to an inner diameter track, middle diameter track and outer diameter track of the optical medium.

3. (Original) The information handling system of Claim 2 wherein variations of the write strategy comprise write power variations and wherein the OPC adjusts the write strategy to write the generated information to an average of the write power at each of the inner, middle and outer diameter tracks that provided a modulated signal having the least amplitude and jitter variations.

4. (Original) The information handling system of Claim 2 wherein the optical medium comprises a DVD-RW disc.

5. (Original) The information handling system of Claim 2 wherein the optical medium comprises a DVD+RW disc.

6. (Original) The information handling system of Claim 2 wherein the optical medium comprises a CD-RW disc.

7. (Original) The information handling system of Claim 1 further comprising volatile memory interfaced with the optical disc drive and operable to store the adjusted write strategy for use on a subsequent write to an optical medium of the same type.

8. Canceled.

9. Canceled.

10. **(Currently Amended)** A method for re-writable optical medium write power calibration, the method comprising:
determining a write strategy from an identification code of an optical medium;
performing test writes and reads at plural locations distributed across the optical medium, the test writes having predetermined variations from the power setting of the write strategy;
analyzing the modulated signal read from each test read to determine the power setting variation ~~at each location~~ having the least amplitude and jitter variations for each of the plural locations distributed across the optical medium;

averaging the determined power setting variations for the plural locations distributed across the optical medium to determine an adjusted write strategy; and writing information to the re-writable optical medium with the adjusted write strategy.

11. (Original) The method of Claim 10 wherein the re-writable optical medium comprises a DVD-RW disc.

12. (Original) The method of Claim 10 wherein the re-writable optical medium comprises a DVD+RW disc.

13. (Original) The method of Claim 10 wherein the re-writable optical medium comprises a CD-RW disc.

14. (Previously Presented) The method of Claim 10 wherein the re-writeable optical medium comprises a medium having an unknown identification code and the write strategy comprises a generic write strategy for use with optical media having unknown identification codes.

15. (Previously Presented) The method of Claim 10 wherein the re-writable optical medium comprises a new medium and the write strategy comprises a generic write strategy associated with a type of re-writable optical medium having an unknown identification code.

16. (Original) The method of Claim 10 further comprising:
storing the adjusted write strategy in volatile memory; and
writing information to another re-writable optical medium having the identification code by using the adjusted write strategy.

17. (Original) The method of Claim 10 wherein performing test writes further comprises performing test writes at an inner diameter, middle diameter and outer diameter location of the optical medium.

18. **(Currently Amended)** A system for re-writable optical medium write power calibration, the system comprising:

a write strategy table associating re-writable optical medium identification codes and write strategies, each write strategy having a write power setting; and
an Optical Power Calibration (OPC) engine interfaced with the write strategy table, the OPC engine operable to determine a write strategy for an optical medium from the write strategy table and to adjust the determined write strategy's write power setting by performing test writes and reads at plural distributed locations of the optical medium, determining the power setting at each of the plural distributed locations that had the lowest read amplitude and jitter variations, and averaging the determined power settings of each of the plural distributed locations to determine the adjusted write power setting.

19. (Previously Presented) The system of Claim 18 wherein the determined write strategy for the optical medium comprises a generic write strategy associated with unrecognized identification codes.

20. (Original) The system of Claim 19 further comprising memory interfaced with the OPC engine and operable to store the adjusted write power setting for use with a write to a subsequent optical medium having the same identification code.

21. (Original) The system of Claim 18 wherein the optical medium comprises a blue laser re-writable disc.